Clinical Laboratory Update

August 2019

www.milwaukee.gov/healthlab

Phone: (414) 286-3526 Fax: (414) 286-5098

Sexually Transmitted Infections

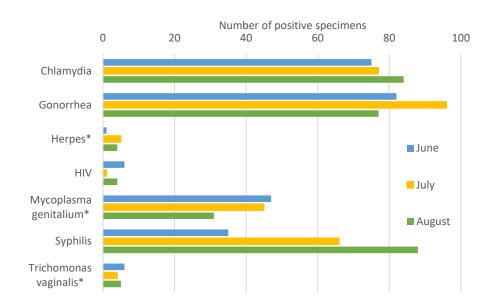


Figure 1: Positive specimens identified using molecular or serological assays for the given organism.

Respiratory Infections

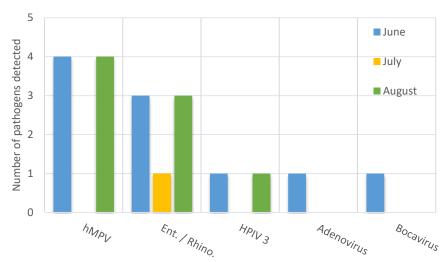


Figure 2: Pathogens detected using the Respiratory Pathogen Panel (RPP) and/or RT-PCR Influenza assay.

Connect with your health department:







From the desk of the Public Health Laboratory Director

Did you know? MHDL is one of two CDC ELITE labs in the state for identifying Legionella from water samples using standard culture techniques. ELITE allows us to consult with local healthcare facilities for water management policy and testing practices per ASHRAE and CDC guidelines.



A team from APHL's Global Health committee had their first visit to Capitol Hill in Washington, DC on September 10, 2019. PHL officials from MI, NE, MHDL, and APHL participated in advocacy and education discussions, which gave us the opportunity to promote the roles of PHLs in disease surveillance, preparedness and response to public health emergencies.



Key highlights:

 Please complete a <u>brief survey</u> to share your feedback on our new monthly report design.

Links to related reports:

MHD SurvNet WI Epi Express

^{*}Not reportable as per WI DHS 145.04 (3) (a)

New HIV Infections



Figure 3: Monthly comparison of rate of new HIV infections in the state of Wisconsin, Milwaukee County, and City of Milwaukee, using state- and county-level data obtained from the Wisconsin Department of Health Services.

Note: This data lags by one month.

For more statewide HIV data, visit: https://www.dhs.wisconsin.gov/hiv/data.
htm.

Syphilis Surveillance

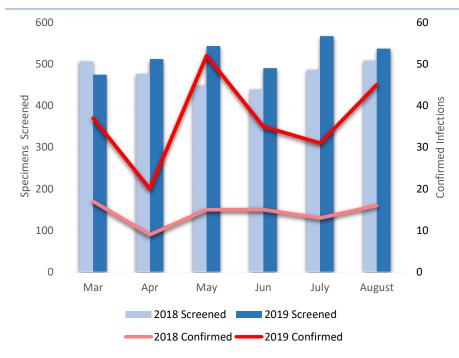


Figure 4: Monthly comparison of syphilis data with year over year comparisons.

Bars: number of specimens screened at MHDL, left axis.

Lines: number of confirmed infections, right axis.

Gonorrhea Antimicrobial Susceptibility Testing

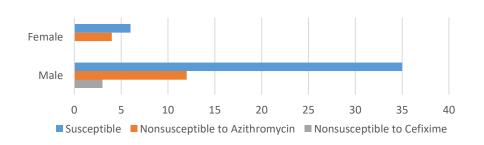


Figure 5: Antibiotic susceptibility profile of Gonorrhea isolates identified in males and females. In August 2019, 16 of 60 cultures tested were found to be nonsusceptible to Azithromycin according to CLSI guidelines, and 3 to Cefixime according to CDC SOPs. MHDL tests for antibiotic resistance to Azithromycin, Ceftriaxone, Cefixime and Gentamicin.

Sexually Transmitted Infections by Source

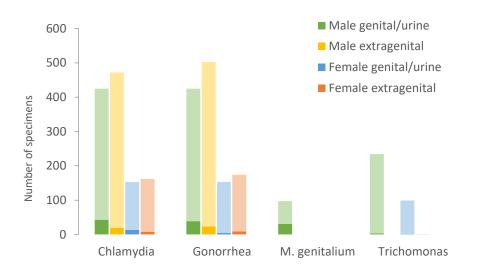


Figure 6: Distribution of STIs detected using NAAT. In August 2019, 6.9% of specimens were positive for Chlamydia, with similar positivity rates among male and female patients. 6.1% of specimens were positive for Gonorrhea, with men 50% more likely to be diagnosed as women. 31.6% of *M. genitalium* specimens were positive, all males. 1.4% of *Trichomonas* specimens were positive, with similar positivity among males and females.

Note: Darker bars indicate positive specimens.

Viral surveillance

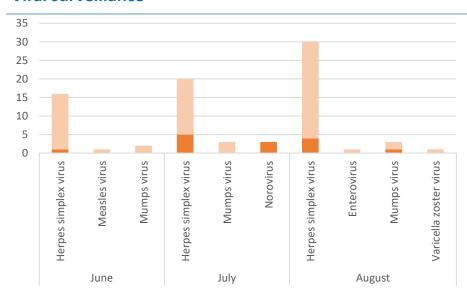


Figure 7: Specimens tested using molecular methods.

Note: Height of bar indicates number of specimens tested.

Darker bars indicate DNA/RNA detected by virus culture, real-time PCR and/or nucleotide sequencing analysis.

Legionella Testing

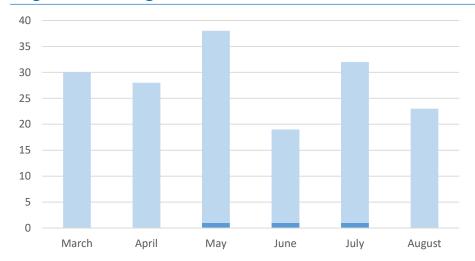


Figure 8: Specimens tested using culture and molecular methods.

*MHDL is one of the **CDC ELITE** certified sites for environmental *Legionella* testing.

Note: Darker bars indicate confirmed Legionella pneumophila by culture and/or real-time PCR.